



Virtual Zoo Guide



Final Design Review



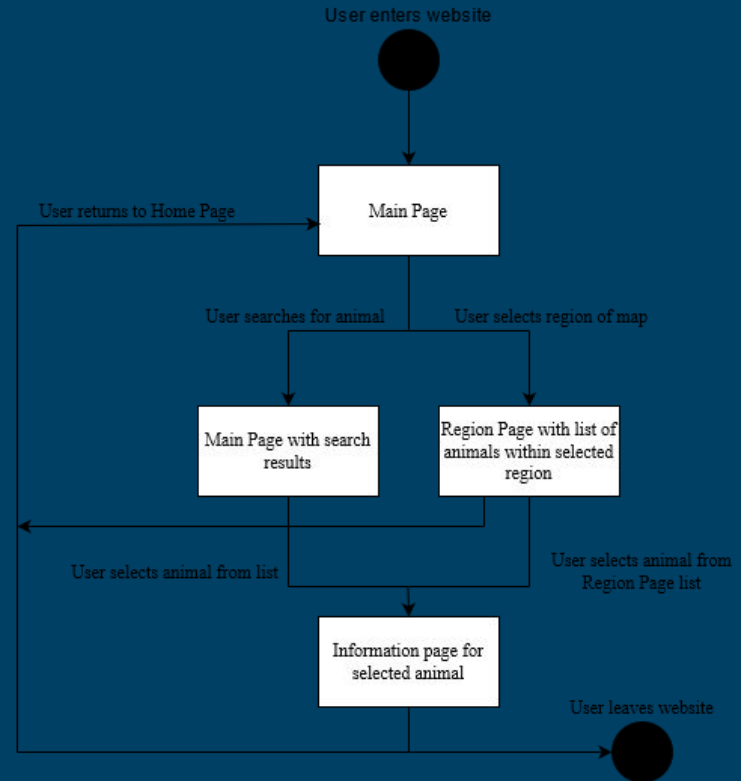
Introduction

This project aims to provide a user the ability to view facts about all of the animals that can be found at the Hattiesburg Zoo. While the zoo does have its own website, ours will differ in that it will offer more facts than what the zoo offers, as well as provide a more direct format for viewing the factual information.

High Level Requirements

The page should display a map with directions upon opening the application	Completed
The user should be able to open the map and the map shall load a list of the animals in that region of the map.	Completed
When an animal is selected from the list, it should display a new animal fact page with it's fact and a photo.	Completed
When the user selects the animal, the map shall zoom in to show where the animal is in the map.	Completed
There shall be a search bar for the desired animal. Upon searching for one, the website should pull up every variety of the animal with that name.	Completed
When a region is selected from the map, the new page shall display a photo of which region the user selected with the list of animals.	Completed
When an animal is selected from the list, the map shall zoom in to the region of the animal.	Not-completed
There will be 'back' buttons on the animal list menu and the animal facts page that shall lead to the previous screen	Completed

State Diagram



ER Diagram and Explanation

Our program works off a single table so there are not really any relationships.

Our program uses this table to select the information we need to display. Whenever information needs to be pulled from the database, we create queries to pull the relevant information we wish to display from the table.

For example, to display the animal names when the 'Animals' tab is selected, it selects only the common_name and iterates for each animal in the table. Then when an animal is selected from the list, a new query is made to only select that animal, then go through each attribute to style and print it to the screen.

animals	
PK	<u>common_name varchar(50) not null</u>
	zoo_region int not null, animal_img text, scientific_name varchar(50) not null, endangered varchar(25), diet varchar(25), class varchar(25), live_region text, environment text, active_time text, discription text, eat text, mating text, facts text,

Test Plan and Results

- Given that there will be a database in addition to the website, our testing method will consist of a unit test which will cycle through the entire database and return positive for each entry if the information is successfully pulled and not null.
- Web page is functioning via thorough manual usage.
- Map itself will be manually tested by loading it onto a mobile phone screen to ensure appropriate scaling.
- The search bar for the website will also be tested to ensure it navigates to the appropriate animals.

Test Plan and Results

- Overview of each specific test.
 - Technical Requirements
 - General Requirements
 - General Requirements on Mobile Device.

Test Identifier	Test Statements	Tested by (initials)	Test Result
1.00	Technical Requirements		
1.01	Load browser to a search page. After starting XAMPP with Apache and MySQL servers (test 1.04), load the page http://localhost/ZooGuide .	ZJ	Pass
1.02	Load the MySQL server with no error. Test connection with MySQL Workbench	ZJ	Pass
1.03	Run ZooGuide.sql script in MySQL Workbench without error. Visually check the table after to see if animals are in the table.	HP	Pass
1.04	Load XAMPP with no errors, and start MySQL and Apache servers with no error.	HP	Pass
1.05	Check to make sure the files are in the file path xampp/htdocs.	CC	Pass
1.06	Make sure Android Studio can load without error. Load the emulator by going to tools -> AVD manager then press the triangle symbol that looks like a play button. Alternately, make sure your phone is connected to the same network as your PC and you have a working browser on your phone. For both of the above methods, load the project on the phone screen by using your PC's IPv4 in place of localhost.	CC	Pass
2.00	General Requirements on PC		
2.01	The index.php page will be loaded and visually assessed to be a map of Hattiesburg Zoo.	SW	Pass
2.02	Each region area will be manually clicked on to see if it loads the ZooGuide_Region_#.php page related to the selected region with a list of animals located in that region.	HP	Pass
2.03	Each animal will be manually clicked to see if the ZooGuide_AnimalResults page displays the correct information on the animal.	SW	Pass
2.04	The back button will be tested by navigating from index.php, to a ZooGuide_Region_#.php, then to a ZooGuide_AnimalResults.php page, and use only the back button to get all the way back to index.php. This will be repeated for each region since there are several different ZooGuide_Region_#.php pages.	HP	Pass
2.06	Random animals will be searched in specific and general forms (ex. Canadian Goose and Goose). We will also test to see if random capitalization matters in input. Lastly, there will be tests to see if random bad data pulls results or returns null.	RG	Pass
2.07	Each region will be selected to see if the map displays a photo of just that region on the ZooGuide_Region_#.php page	RG	Pass
3.00	General Requirements on Mobile Device		
3.01	The index.php page will be loaded and visually assessed to be a map of Hattiesburg Zoo.	ZJ	Pass
3.02	At least one region will be selected to see if it pulls up the appropriate ZooGuide_Region_#.php, and that it displays the appropriate animals for that region.	ZJ	Pass
3.03	At least one animal will be selected from the list in ZooGuide_Region_#.php to ensure it displays the information properly on a phone screen.	ZJ	Pass
3.04	The back button will be tested by navigating from index.php, to a ZooGuide_Region_#.php, then to a ZooGuide_AnimalResults.php page, and use only the back button to get all the way back to index.php. This only needs to be performed on one region just to ensure the links work properly.	CC	Pass
3.06	At least one random animal will be searched in general and specific formats, and one bad input will be tested.	CC	Pass
3.07	At least one random region will be selected to ensure that a picture will display on the ZooGuide_Region_#.php page.	CC	Pass

Problems/Challenges

- Creating a resizable version of the map which allows the map to adjust to whatever screen size it is on.
- Researching and deciding which programming languages, applications, and IDEs to use that would work for this type of project.
- The separation of work of the same product which leads to wasted time.

Missed Requirements

- 2.05 - When an animal is selected from the list menu, the map will zoom in to show where the animal is. This will be displayed by the animals information.

Questions?

Comments or other feedback is also welcome.